

Material Properties: Low Temperature EPDM LM426288 (Developmental Material)

Specification: Draft AMS7XXX

All testing done on AS568-214 unless otherwise noted

Original Properties	Specification (Draft)	LM426288
Original Properties		
Shore M Durometer, ASTM D2240	80 ± 5	77
Tensile Strength, psi, ASTM D1414	1400 min.	2117
Ultimate Elongation, %, ASTM D1414	125 min.	210
Specific Gravity, ASTM D297	As determined	1.16
High Temperature Air Oven Age, ASTM D573, 70 hours at 300°F		
Hardness change, Shore M, ASTM D2240	+10 max.	+7
% Tensile Strength change, ASTM D1414	-25 max.	+13
% Elongation change, ASTM D1414	-10 max.	-2
Low Temperature, TR-10 and DSC Tg		
As Received, TR-10, °F	-60 or colder	-71
Glass transition, Tg, Inflection, ASTM D7426	-51 or colder	-76
Fluid Soaked in Skydrol 5 for 70 hours at 160°F, TR-10, °F		-71
Fluid Soaked in Skydrol 5 for 70 hours at 160°F, Tg, Inflection, ASTM D7426		-76
Compression Set, ASTM D395 Method B and ASTM D1414		
% Permanent Set, 22 hours at 250°F	30 max.	12
Properties		
Immersion in Skydrol 500 B-4, 336 hours at 225°F, ASTM D471		
Hardness change, Shore M, ASTM D2240	0 to -15	-6
Tensile Strength, psi, ASTM D1414	1190 min.	2161
Ultimate Elongation, %, ASTM D1414	125 min.	225
% Volume change, ASTM D471	0 to +18	+9
Compression Set, ASTM D395 Method B and ASTM D1414, 22 hours at 257°F	20 max.	-3
Compression Set, ASTM D395 Method B and ASTM D1414, 70 hours at 160°F	20 max.	-4
Immersion in Skydrol 5, 336 hours at 225°F, ASTM D471		
Hardness change, Shore M, ASTM D2240	-10 max.	-5
Tensile Strength, psi, ASTM D1414	1350 min.	2205
Ultimate Elongation, %, ASTM D1414	125 min.	231
% Volume change, ASTM D471	+1 to +18	+12
Compression Set, ASTM D395 Method B and ASTM D1414, 22 hours at 257°F	20 max.	-9
Compression Set, ASTM D395 Method B and ASTM D1414, 70 hours at 160°F	20 max.	-2

© Copyright 2019

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.